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SEPARATOR
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ABSTRACT:

PROBLEM TO BE SOLVED: To improve the deterioration of the function to separate solid from liquid of hollow tubular membranes by immersing aeration means which are connected to

air feed pipes for aeration and eject air bubbles into the water in a treating vessel and enclosing the aeration means by the hollow tubular membranes constituting membrane modules.

SOLUTION: Many pieces of the hollow tubular membranes 11 of a water collecting device 12 consisting of the hollow annular bodies of the membrane modules are bent to a U shape by each piece and both ends are plunged and fixed into the hollow water collecting parts 12' of the annular bodies. These membranes exist in the diametral direction of the annular bodies. The aeration means 20 of a resembling shape having the external shape slightly smaller than the internal shape of the cage shapes formed by interlinkage of the U-shaped parts of the many hollow tubular membranes 11 under the annular bodies are concentrically fitted into the cages to prevent the adhesion of SS by uniformly ejecting the air bubbles to all the hollow tubular membranes 11 and applying vibrations thereto. As a result, the long-term and continuous collecting of the permeated liquid P permeating the hollow tubular membranes 11 is made possible and the occurrence of the deterioration in the function to separate solid from the liquid is eliminated. The attachment and detachment of the membranes are facilitated and the washing of the membranes by taking the deteriorated membranes outside the system is facilitated.

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